EPSON STYLUS® PRO 4000

Product Reference Guide 1.0

Advanced Desktop Printer Technology

For Professionals

Product Positioning

"In 1996, the Epson Stylus Color 3000 represented the ultimate desktop color printer for creative professionals."

"In 2003, the all new Epson Stylus Pro 4000 builds on this strategy, but takes the image quality, ink technology, and print speed to a new level."

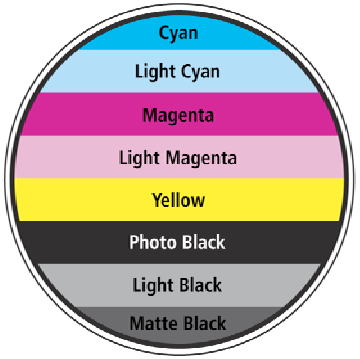
"The Epson Stylus Pro 4000 incorporates all of our latest ink, print head, and printer engine technologies, ensuring your creative vision will be produced without compromise."

EPSON STYLUS PRO 4000

Completely New

Print Engine Design

EPSON®



7-Color Epson UltraChrome™ Ink with 8-Channel Print Head Technology

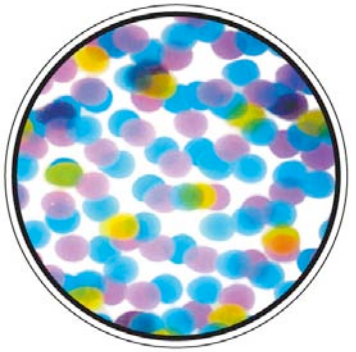
Includes both Matte and Photo Black Inks for Automatic Switching Between Black Modes

Professional Media Handling

Prints on virtually any media type in roll or cut sheet up to 17″ wide

High Performance Print Engine

Now up to twice as fast as our previous Epson Stylus Pro model line!



True 2880 x 1440 dpi Resolution

With variable droplets as small as 3.5 picoliter

microscopic enlargement shown above

EPSON®

Professional Level ICC Profiles

All new RGB ICC profiles for extremely accurate color out of the box

Easy-to-Use Front Control Panel

With backlight display and ink level indicators

Intelligent High-Capacity Ink System

8 individual ink cartridges available in 110ml or 220ml sizes

Auto Head Alignment & Nozzle Check Technology

Built-in white beam sensor precisely aligns and checks all color channels automatically

EPSON®

➤ All New 8-Channel Print Head Technology

- Print head design capable of handling eight separate ink channels
- 1-inch wide high-performance print head
- 180 nozzles per channel x 8
- Two configurable ink modes – Photographic or Dual CMYK

Two Configurable Ink Modes

Depending upon media type and print application, user can switch back and forth between two different ink modes:

Ink Mode	Ink Configuration	Ideal Print Application
Photographic	C M Y K c m k MK	Photo, Fine Art, Graphics, Proofing, GIS, CAD, or any print application
Dual CMYK	C M Y MK C M Y MK	CAD, GIS, or any plain paper printing

The 7-Color Photographic Ink Mode is about 1.9 times faster than previous Epson Stylus Pro models.
While the Dual CMYK Ink Mode is about 98% faster than the Photographic Ink Mode!

17"

7-Color Photographic Mode or

4-Color Dual CMYK Mode

Print Head Technology for the Future

- **Maximum Resolution of 2880 x 1440 dpi**
  - Incredibly sharp text and line art rivaling a final printing press
  - Extremely fine blends and photographic transitions
- **Variable Droplet Micro Piezo® DX3™ Technology**
  - Produces variable sized droplets as small as 3.5 picoliter
  - Greatly decreases print times while optimizing photographic quality
  - Proprietary DX3 ASIC technology controls the printing process resulting in consistent image quality and color output from print to print
- **Automatic Head Alignment Technology**
  - Built-in white beam sensor reads printed data for highly precise alignments of all color channels automatically
  - Aligns both single and bi-directional print modes
- **Auto Nozzle Check Technology**
  - Built-in white beam sensor reads nozzle check pattern and automatically cleans print head if any problems are found – even partially clogged nozzles!

17"

7-Color Pigmented Inking System with Built-in Matte Black

- Depending upon media type being used, printer automatically switches between Photo Black and Matte Black Ink modes to optimize black ink density
- Extremely wide color gamut for the most demanding color requirements
- No perceivable short-term color shift for stable prints immediately after printing
- Excellent water and lightfastness

Exclusive Light Black Ink for Superior Photographic Reproduction

- Significantly improves the printer's gray balance while eliminating color casts
- Dramatically improves the midtones and highlights for smoother transitions
- Reduces the metamerism effect of basic pigment ink chemistry
- Enhances the ICC profiling process for ColorSync™ and ICM™ workflows

17"

Award-winning

Pigmented Ink Technology

Available only when using the Photographic Ink Mode (7-Color Ink Configuration)

Two Built-in Black Ink Modes – Photo Black & Matte Black

Depending upon the media type being used, printer will automatically switch between Photo Black and Matte Black Ink modes to optimize black ink density for your specific media type. By optimizing the black ink density, optimal print quality can be achieved.

➤ Epson Photo Black Ink Technology

- Epson's patented Microcrystal Encapsulation Technology encapsulates an acrylic resin around the pigmented ink particle. This allows for optimal image quality on coated ink jet and other photographic medias such as Epson Premium Luster, Premium Glossy, and Premium Semimatte Photo Papers.
- Depending upon the media type, you can achieve a black D-Max up to 2.0

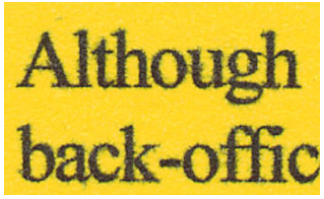
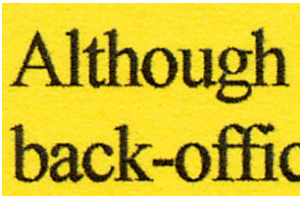
➤ Epson Matte Black Ink Technology

- Matte Black ink is a pigmented black ink that does not use our acrylic resin encapsulated technology and is optimized for plain paper or matte media types such as Epson Enhanced Matte, UltraSmooth Fine Art, Somerset Velvet, etc.
- Depending upon the media type, you can achieve a black D-Max up to 1.69

17"

Photo Black can be used for ALL media types, but some plain paper or fine art media will benefit greatly by using the Matte Black Ink Technology

Epson UltraChrome Matte Black Ink Technology is superior to standard dye based inks for plain or matte type paper printing

Benefits	Standard Dye Black Inks	Epson Matte Black Inks
➤ Higher Optical Density ➤ Sharper Text & Line Art	 Optical Density = 1.3	 Optical Density = 1.69
➤ Less Bleeding ➤ Superior Printing on recycled media types	 (plain recycled Paper)	 (plain recycled Paper)

17"

Epson Photo Black Ink can be used for ALL media types, but some plain paper or fine art media will benefit greatly by using the Matte Black Ink Technology

➤ Wilhelm Imaging, Inc. lightfastness ratings for prints displayed under non-UV or UV coated glass.

Epson Media Type	Color Ratings Non-UV | UV	B & W Ratings Non-UV | UV
Premium Glossy Photo Paper (250)	85 | >100 years	135 | >150 years
Premium Luster Photo Paper (Roll)	71 | >100 years	80 | >100 years
Premium Semimatte Photo Paper (250)	67 | >100 years	76 | >100 years
UltraSmooth Fine Art	>75 | >100 years	>100 | >100 years
Somerset Velvet for Epson (Roll & Sheet)	62 | >100 years	90 | >100 years
Enhanced Matte Paper	64 | >100 years	>150 | >150 years
Epson Canvas w/PremierArt™ Spray	82 | >100 years	>130 | >130 years

Lightfastness data by Wilhelm Imaging Research, Inc. For more information visit http://www.wilhelm-research.com/

Ink lightfastness ratings based on accelerated testing of prints on specialty media, displayed indoors, under glass. Actual print stability will vary according to media, printed image, display conditions, light intensity, humidity, and atmospheric conditions. Epson does not guarantee longevity of prints. For maximum print life, display all prints under glass or lamination or properly store them.

17"

Lightfast Ratings

For Professionals

➤ Professional Level Black and White Photographic Printing

- Produces a truly consistent image with little color crossover or colorcasts
- Reduced metamerism when printing a 7-color black and white print
- Depending upon media, produces a black D-max up to 2.0
- Produces sellable quality neutral or toned black and white prints

Available only when using the Photographic Ink Mode (7-Color Ink Configuration)

Sepia

Neutral Gray

Cool Gray

Warm Gray

17"

"Epson UltraChrome Ink provides me with the missing link for producing black & white prints."

– Mac Holbert, NASH Editions

Advanced 17-inch Wide Print Engine

➤ Professional Media Handling

- Prints on virtually any media type in roll or cut sheet up to 17-inch wide
- Built-in high-capacity paper tray handling up to 250 sheets of plain letter sized paper or up to 50 sheets of photographic media at 17" x 22"
- Can print on both sides of the media without damaging the previously printed side
- User-adjustable Roll Media Spindle accepts either 2-inch or 3-inch media cores
- Four built-in media paths including roll feed, cut-sheet tray, front-top manual feed, and a straight-through front manual feed handling weights up to 1.5mm thick
- Built-in automatic media cutter

➤ True BorderFree™ Printing

- Capable of printing off both left and right edges of roll based media, while automatically cutting top and bottom edges to produce a full-bleed print on all four sides
- Fully trims your finished prints more accurately and safely than by hand

17"

Unsurpassed

Media Flexibility

Unsurpassed Media Flexibility

Up to 17-inch Wide Roll
Auto-loading roll media
Handles both 2" and 3" cores
Up to 132 feet of media
Handles media up to 250 g/m^2

Up to 17-inch Wide Cut Sheet
Auto-loading single sheet feeder
Top loading with paper guide
Handles media up to 0.7mm

Up to 17-inch Wide Cut Sheet
Single sheet feeder
Front or Rear Manual-loading
Straight-through media path
Handles media up to 1.5mm

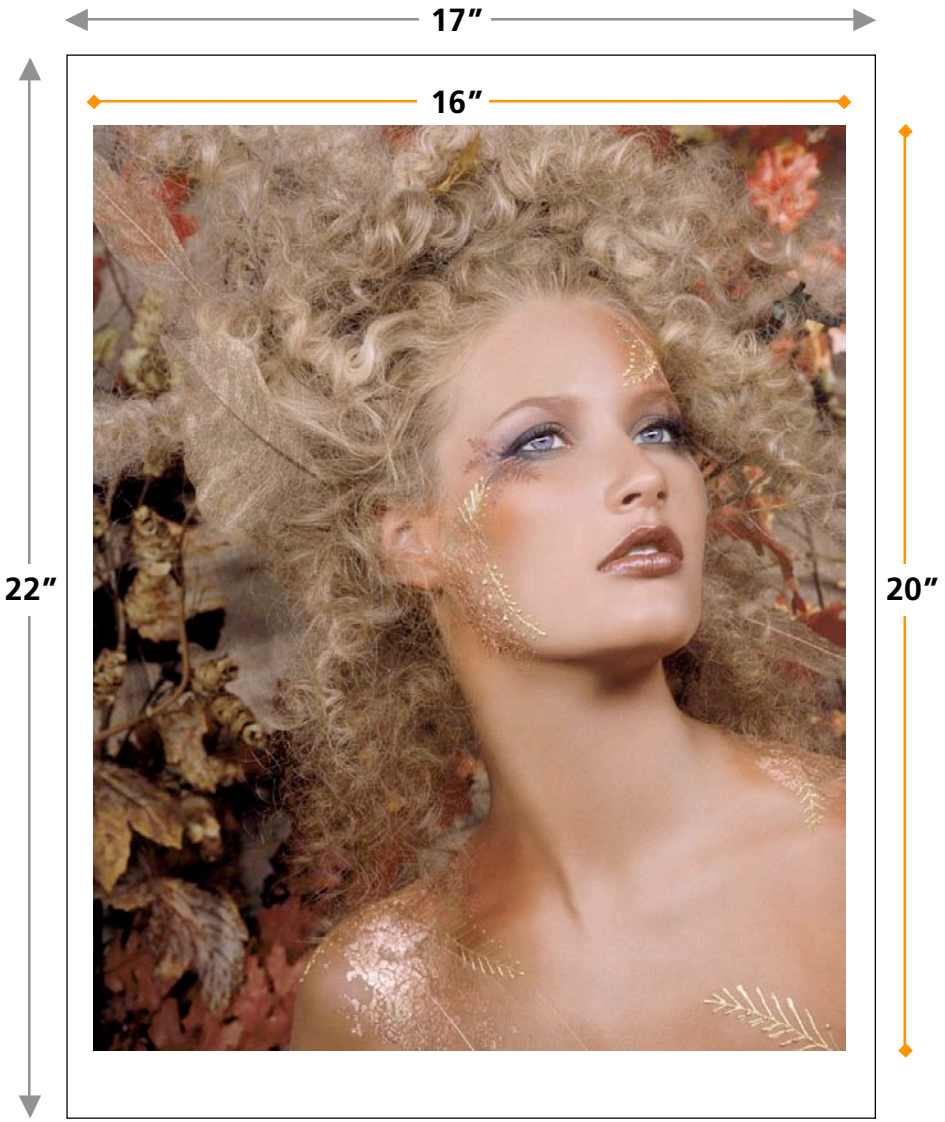
Up to 17" x 22" Cut Sheet
High-Capacity Paper Tray
Up to 250 sheets of plain paper
Up to 150 sheets of photo media
Handles media up to 250 g/m^2

Up to Four
Built-in Media Paths

EPSON

The Benefit of 17" x 22" Cut Sheet

Professional Photography



Photograph © 2003 Douglas Dubler³ Photography

- **Produces a Full 16" x 20" on 17" x 22" Cut Sheet Media**
  - Allows for enough room around the 16" x 20" image for matting and framing
  - This maximizes the entire 16" x 20" print rather than needing to bleed into the image area for matting or mounting
  - Cut sheet media always comes out flat versus roll based media - no curl!
  - The high capacity paper tray can accommodate up to 50 sheets of 17" x 22" photographic media at once
  - You can also produce full bleed 8"x 10", 8"x 12",11"x 14",16"x 20", and even up to 17" by any length using roll media

Unique

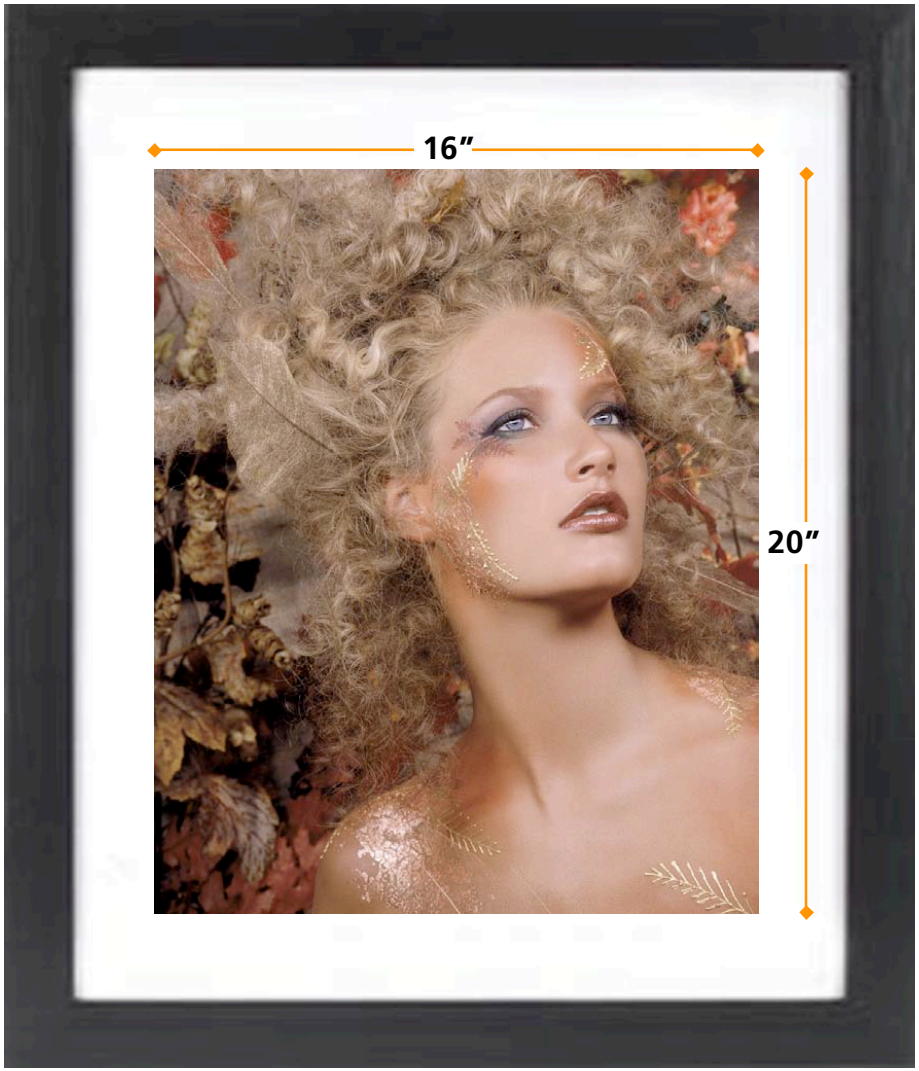
17" x 22" Cut Sheet

for Professional 16" x 20" Prints

EPSON

The Benefit of 17″ x 22″ Cut Sheet

Professional Photography



The Ultimate

16″ x 20″

Photo Printer

EPSON®

The Benefit of 17" x 22" Cut Sheet

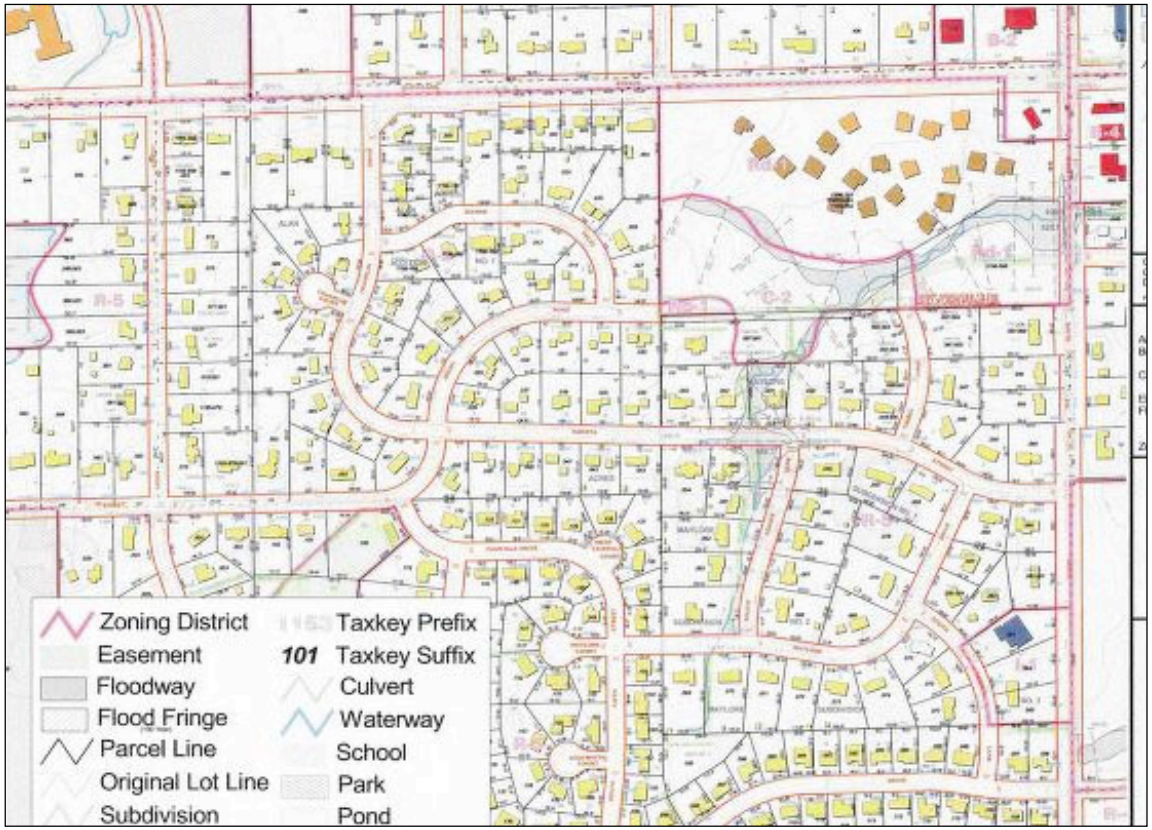
Graphic Design | Pre Press Proofing

All the Room a Creative Professional Needs On the Desktop!

EPSON®

The Benefit of 17" x 22" Cut Sheet

GIS Mapping | CAD



17"

22"

The Ultimate US C-Size Photographic Printer

On the Desktop!

EPSON

Newest Epson Professional Media Additions

Epson Media Type	Epson Part No.	Media Size
Premium Luster Photo Paper (250)	S041737	16″ x 100′ Roll
Premium Luster Photo Paper (250)	TBD[1]	17″ x 22″ Sheets
Premium Semimatte Photo Paper (250)	S041738	16″ x 100′ Roll
Premium Semimatte Photo Paper (250)	TBD[1]	17″ x 22″ Sheets
Proofing Paper Commercial Semimatte	S041724	17″ x 100′ Roll
Enhanced Matte Paper	S041725	17″ x 100′ Roll
Enhanced Matte Paper	TBD[1]	17″ x 22″ Sheets
SingleWeight Matte Paper	S041746	17″ x 132′ Roll
SingleWeight Matte Paper	S041759	17″ x 22″ x 100 Sheets
UltraSmooth Fine Art Paper (250)	SP91205	17″ x 50′ Roll
PremierArt™ Water Res. Canvas for Epson	SP91221	17″ x 40′ Roll

Check with your local Epson Reseller for the latest pricing and availability on the complete line of Epson Professional Media

[1]Expected to ship Q1 2004.

17″

Media Options

For Professionals

Epson Intelligent High-Capacity Ink System

- Eight 110ml or 220ml ink cartridges with automatic tracking of key data points such as ink levels, ink type and usage rates, for accurate production cost estimates
- Greatly increases productivity by replacing ink cartridges on the fly, even during the middle of a print job, with no loss in image quality or production time
- Utilizes both 110ml and 220ml ink cartridges simultaneously to further optimize ink usage

High-Capacity Inks

for Low Printer Maintenance

17"

Advanced 17-inch Wide Print Engine

True Cross-Platform OS Support

- Enhanced Epson Photographic drivers for Macintosh® and Windows® allowing for complete ink density control even when driver color management is turned off
- For graphic designers, an optional Epson StylusRIP Professional 2.0 software RIP is available – featuring true Adobe® PostScript® 3
- Fully supported by most leading third party RIPs and workflows – the Epson Stylus Pro series of printers are used within the most demanding printing environments

Superior Connectivity

- Includes one USB (1.1 and 2.0), one IEEE 1394 FireWire™, and one Epson Expansion Slot for installing the optional 10/100 BaseT Ethernet card

17"

Quick Performance Summary

Overall, the new **Epson Stylus Pro 4000 is about 1.7 to 1.9 times faster than our Epson Stylus Pro 7600** model.

The Epson Stylus Pro 4000 is using our latest print head technology – making it one of the fastest ink jet printers ever made by Epson.

The next three slides will give you more details for your specific printing application.

The following speed information is good for comparing various printer driver modes. They are to be used as a benchmark for your planning purposes only.

The Fastest

Ink Jet Printer in its Class!

17"

High Performance Print Engine Speeds

Graphics/Prepress Proofing

Photographic Ink Mode (7-Color)

C M Y K c m k MK

PRINT MODE	IMAGE SIZE	PRINT TIME	QUALITY DESCRIPTION
Normal - 360 (HS)[1]	Letter	50 secs	Acceptable high-speed plain paper mode - slight banding
Fine - 720 (HS)[2]	Letter	1:11	Photo quality print mode - noticeable grain
Fine - 720[2]	Letter	2:25	Photo quality print mode - slightly reduced grain than 720 (HS)
SuperFine - 1440 (HS)[2]	Letter	2:09	Photo quality print mode - hardly noticeable grain
SuperFine - 1440[2]	Letter	3:40	Continuous tone print mode - no visible grain - equal to photo lab
SuperPhoto - 2880 (HS)[2]	Letter	5:35	Exceptional print quality - smoother than 1440
SuperPhoto - 2880[2]	Letter	9:30	Exceptional print quality - extremely smooth looking - superior to any lab
Normal - 360 (HS)[1]	13" x 19"	1:44	**Internal Drafts / Comping Quality**
Normal - 360[1]	13" x 19"	2:47	Acceptable high-speed plain paper mode - slight banding
Fine - 720 (HS)[2]	13" x 19"	2:23	**Everyday Production Quality**
Fine - 720[2]	13" x 19"	5:00	Photo quality print mode - slightly less grain than 720 (HS)
SuperFine - 1440 (HS)[2]	13" x 19"	4:36	Photo quality print mode - hardly noticeable grain
SuperFine - 1440[2]	13" x 19"	7:49	**Final Proofing / Contract Quality**
SuperPhoto - 2880[2]	13" x 19"	18:44	**Client Presentations - Highest Quality**

17"

[1]Test run on Epson Photo Quality Ink Jet Paper | [2]Test run on Epson Premium Luster Photo Paper | HS=High Speed (Bi-D) Print Mode

Print times represent print engine speeds only. They do not include network, CPU, Spool, RIP, and paper setup times. Add ~23 secs for paper setup times

This color represents an Epson recommended print mode for this market segment

Letter Test Image

13"x19" Test Image

High Performance Print Engine Speeds

Professional Photography

Photographic Ink Mode (7-Color)

C M Y K c m k MK

PRINT MODE	IMAGE SIZE	PRINT TIME	QUALITY DESCRIPTION
Fine - 720 (HS)[2]	8" x 10"	1:07	Photo quality print mode - noticeable grain
Fine - 720[2]	8" x 10"	2:27	Photo quality print mode - slightly reduced grain than 720 (HS)
SuperFine - 1440 (HS)[2]	8" x 10"	2:21	Photo quality print mode - hardly noticeable grain
SuperFine - 1440[2]	8" x 10"	3:48	Continuous tone print mode - no visible grain - equal to photo lab
SuperPhoto - 2880 (HS)[2]	8" x 10"	7:08	Exceptional print quality - smoother than 1440
SuperPhoto - 2880[2]	8" x 10"	9:16	Exceptional print quality - extremely smooth looking - superior to any lab
Fine - 720 (HS)[2]	16" x 20"	4:11	Photo quality print mode - noticeable grain
Fine - 720[2]	16" x 20"	7:50	Photo quality print mode - slightly less grain than 720 (HS)
SuperFine - 1440 (HS)[2]	16" x 20"	6:06	Photo quality print mode - hardly noticeable grain
SuperFine - 1440[2]	16" x 20"	10:25	Continuous tone print mode - no visible grain - equal to photo lab
SuperPhoto - 2880 (HS)[2]	16" x 20"	14:54	Exceptional print quality - smoother than 1440
SuperPhoto - 2880[2]	16" x 20"	24:47	Exceptional print quality - extremely smooth looking - superior to any lab

[2]Test run on Epson Premium Luster Photo Paper | HS=High Speed (Bi-D) Print Mode

Print times represent print engine speeds only. They do not include network, CPU, Spool, RIP, and paper setup times. Add ~23 secs for paper setup times

This color represents an Epson recommended print mode for this market segment

17"

8" x 10" Test Image

16"x20" Test Image

High Performance Print Engine Speeds

Engineering/Scientific

Dual CMYK Ink Mode (4-Color)

C M Y MK C M Y MK

PRINT MODE	IMAGE SIZE	PRINT TIME	QUALITY DESCRIPTION
Normal - 360 (HS)[1]	17″ x 22″	1:30	Acceptable high-speed plain paper mode - slight banding
Normal - 360[1]	17″ x 22″	2:05	Very good high-speed plain paper mode - slight banding
Fine - 720 (HS)[1]	17″ x 22″	2:09	High quality print mode - slight grain - very little banding
Fine - 720[1]	17″ x 22″	3:15	High quality print mode - slightly reduced grain than 720 (HS)
SuperFine - 1440 (HS)[1]	17″ x 22″	3:37	Photo quality print mode - hardly noticeable grain
SuperFine - 1440[1]	17″ x 22″	5:58	Photo quality print mode - no noticeable grain

[1]Test run on Epson Photo Quality Ink Jet Paper | HS=High Speed (Bi-D) Print Mode

Print times represent print engine speeds only. They do not include network, CPU, Spool, RIP, and paper setup times. Add ~23 secs for paper setup times

This color represents an Epson recommended print mode for this market segment

17″

17″ x 22″
Test Image

World Class Service and Support

- **Standard 1-Year Epson Preferred[sm] Protection Plan**
  - Prompt answer toll-free phone support with personal PIN ID (supplied in-box) available Monday thru Friday
  - Usually next-business-day full unit exchange service
- **Optional 1- or 2-Year Epson Preferred Plus Service Available**
  - Allows you to continue all the great benefits of the standard Epson Preferred Protection Plan once the free 1-Year warranty expires
  - Available for purchase at any time before the standard 1-Year Epson Preferred Protection Plan expires
  - The cost for one out-of-warranty service call could be more expensive than a 2-Year optional Preferred Plus Service contract!

17"

Epson Recommends the Purchase of the
Optional 1- or 2-Year Preferred Plus Service Programs
For the Best Possible Support for Your Investment

Pricing and Availability

- **Incredible Price/Performance Ratio**
  - Epson Stylus Pro 4000 (17") only **$1,795** estimated purchase price
- **Product Availability**
  - Epson resellers are taking orders starting on October 20, 2003
  - Product expected to ship on January 2, 2004

The Epson Stylus Pro 4000 represents an

Incredible Value for the Most Demanding Creative Professional

17"

Optional
Printer Cabinet Stand $399
Estimated Purchase Price

Competitive Comparisons

HP DesignJet 120 series

Epson Stylus Pro 7600

Canon imagePROGRAF W2200

17″

Primary Competition

HP DesignJet 120 series

FEATURE	Epson Stylus Pro 4000	HP DesignJet 120	HP DesignJet 120nr
Maximum Media Width	17" (auto, manual, or roll)	24" (manual feed only)	24" (manual or roll feed only)
Maximum Roll Media Width	17" Wide - Standard	Optional 24" Wide Roll	24" Wide - Standard
Built-in Media Cutter	Yes	No	Yes
Max. Paper Cassette Sheet Size	17" x 22"	13" x 19"	13" x 19"
Max. Paper Cassette Sheet Quantity	Up to 250 sheets	Up to 100 sheets	Up to 100 sheets
Maximum Print Resolution	2,880 x 1,440 dpi	2,400 x 1,200 dpi	2,400 x 1,200 dpi
Print Head Technology	Variable Droplet Micro Piezo DX3	Thermal Ink Jet	Thermal Ink Jet
Smallest Droplet Size	3.5 Picoliter	4 Picoliter	4 Picoliter
Nozzle Configuration	180 Nozzles x 8	Data Not Provided by HP	Data Not Provided by HP
Inking System	8-channels running 7 colors	6-color	6-color
Maximum Ink Cartridge Size	220ml x 8 (110ml x 8 std)	28ml x 2 + 69ml x 4	28ml x 2 + 69ml x 4
Ink Type	Epson UltraChrome (pigment)	HP Dye	HP Dye
13" x 19" Print Speed[1]	2:23 min:sec	4:28 min:sec	4:28 min:sec
Short Term Color Stability	Perfect for Prepress Proofing	Not Good Enough for Prepress Proofing	
Long Term Color Stability	Perfect for Pro Photography	Not Good Enough for Professional Photography	
Print Quality Opinion	Astonishing Photo Quality	Good for Graphics; Not Usable for Photography	
Maximum Media Weight	1.5mm Thick Poster Board	80lb. Bond	80lb. Bond
Borderless Printing	Yes - All Four Sides	No	No
Auto Head Alignment	Yes	No	No
Standard Connectivity	USB 2.0, FireWire, Type-B Slot	USB 2.0, Parallel, EIO Slot	USB 2.0, Parallel, 10/100 BaseT
Optional Connectivity	10/100 BaseT Ethernet	10/100 BaseT Ethernet	None Needed
Standard Printer Language	ESC/P2	PCL3GUI	PCL3GUI
Optional Printer Language	Adobe PostScript 3	Adobe PostScript 3	Adobe PostScript 3
Standard Driver Support	Mac OS 9, X, & Windows	Mac OS 9, X, & Windows	Mac OS 9, X, & Windows
Standard Warranty	1-Year Full Unit Exchange	1-Year Full Unit Exchange	1-Year Full Unit Exchange
Estimated Purchase Price	**$1,795**	**$1,295**	**$1,895**

17"

[1]13" x 19" print sample printed at equal quality on both units | This color represents a winning feature within the comparisons.

Competitive Summary – Epson Stylus Pro 4000 vs. HP DesignJet 120 series

Overall, the Epson Stylus Pro 4000 is a better product than either the HP DesignJet 120 or 120nr. Made mostly of lightweight plastics, the DJ 120 series feels and looks cheap when compared to Epson's brushed steel face, unique case design and solid build quality.

Because they use dye inks, these units are not capable of serious prepress proofing or photographic applications due to poor color stability. Because the Epson has 100% pigmented inks, both short-term and long-term color stability are exceptional.

The image quality from the HP is good enough for everyday graphic design work. This is the best application for the HP's. However, the Epson excels at not just graphic design work, but also serious proofing and photographic work, making the Epson a far more usable printer for your investment.

Over 50 third-party RIP solutions makes the Epson stand apart from HP. The Epson Stylus Pro 4000 has the unique ability to start off as a simple graphics printer, but can later be used for serious contract proofing applications as your business grows.

Another major benefit of the Epson is its 17" wide high-capacity paper cassette. While the HP DJ 120 series has a standard cassette handling the typical 13" x 19" paper size, the Epson has the ability to handle cut-sheet media in quantity up to 17" x 22". This gives the user much more flexibility in producing larger comps, design layouts, packaging mockups or final proofs that include all the necessary data for final print production – at 100% actual size! No trimming, no scaling, no taping!

The Epson has the ability to print on media as thick as 1.5mm poster board! This gives you the ultimate flexibility in producing mockups of just about any type of material. Epson is considered the standard for fine art printing as well. The ability to handle thick media types, gives photographers and fine artists the ability to maximize their media choices.

17"

With the Epson Stylus Pro 4000, you will be spending more time printing and less time maintaining. Due to permanent print head technology that never needs replacing, auto head alignment, auto nozzle check technology, in addition to eight 110ml or 220ml ink tanks, the Epson will rarely need your attention. This is a major benefit over the HP DJ 120 series.

When you compare the final output quality and speeds from both units, the Epson becomes the overall winner. The Epson is not only faster than the HP, but produces a significantly better print – giving you the competitive edge.

Primary Competition

Epson Stylus Pro 7600

FEATURE	Epson Stylus Pro 4000	Epson Stylus Pro 7600 UltraChrome
Maximum Media Width	17"	24"
Maximum Roll Media Width	17" Wide - Standard	24" Wide - Standard
Built-in Media Cutter	Yes	Yes
Max. Paper Cassette Sheet Size	17" x 22"	Not Available
Max. Paper Cassette Sheet Quantity	Up to 250 sheets (plain paper)	Not Available
Maximum Print Resolution	2,880 x 1,440 dpi	2,880 x 1,440 dpi
Print Head Technology	Variable Droplet Micro Piezo DX3	Variable Droplet Micro Piezo DX3
Smallest Droplet Size	3.5 Picoliter	4 Picoliter
Nozzle Configuration	180 Nozzles x 8	96 Nozzles x 7
Inking System	8-channels running 7-colors	7-color
Maximum Ink Cartridge Size	220ml x 8 (110ml x 8 std)	220ml x 7 (110ml x 7 std)
Ink Type	Epson UltraChrome (pigment)	Epson UltraChrome (pigment)
13" x 19" Print Speed[1]	4:03 min:sec	7:51 min:sec
Short Term Color Stability	Perfect for Prepress Proofing	Perfect for Prepress Proofing
Long Term Color Stability	Perfect for Pro Photography	Perfect for Pro Photography
Print Quality Opinion	Astonishing Photo Quality	Astonishing Photo Quality
Maximum Media Weight	1.5mm Thick Poster Board	1.5mm Thick Poster Board
Borderless Printing	Yes - All Four Sides	Yes - All Four Sides
Auto Head Alignment	Yes	No
Standard Connectivity	USB 2.0, FireWire, Type-B Slot	USB 2.0, Parallel, Type-B Slot
Optional Connectivity	10/100 BaseT Ethernet	10/100 BaseT Ethernet
Standard Printer Language	ESC/P2	ESC/P2
Optional Printer Language	Adobe PostScript 3	Adobe PostScript 3
Standard Driver Support	Mac OS 9, X, & Windows	Mac OS 9, X, & Windows
Standard Warranty	1-Year Full Unit Exchange	1-Year On-site Warranty Service
Estimated Purchase Price	**$1,795**	**$2,995**

17"

[1]Printed at 720 x 720 dpi (uni-d) photo quality | This color represents a winning feature within the comparisons

Competitive Summary – Epson Stylus Pro 4000 vs. Epson Stylus Pro 7600

The choice between buying the Epson Stylus Pro 4000 or Epson Stylus Pro 7600 is difficult. The Epson Stylus Pro 7600 is expected to become the main competitor to the Epson Stylus Pro 4000. In the end, the main reasons to buy the SP4000 over the SP7600 is cut sheet media support, print speeds, and price.

If you're a photographer working mainly in 16" x 20" or smaller formats – the SP4000 is the better choice.

If you're a graphic designer working mainly with cut-sheet media or 2-up spreads – the SP4000 is the ultimate choice.

If you're a prepress house or commercial printer looking for a contract quality proofing device, the SP4000 is the better choice for 2-up or newspaper volume proofing, while the SP7600 is better for 4-up or larger proofing jobs. In addition, you may find the SP4000 affordable enough to place at key customer locations for their use as a remote proofer. Since both the SP4000 and SP7600 use the exact same EPSON UltraChrome Ink technology, they make an awesome team for all your professional proofing requirements. Many third-party RIP companies are developing complete remote proofing solutions around these technologies.

Overall, the Epson Stylus Pro 4000 is about 1.9 times faster than the SP7600 while producing slightly better image quality. The ability to not have to switch between Photo Black and Matte Black ink modes is a huge benefit over the SP7600, which requires a manual ink cartridge switch in order to obtain the same ink mode.

Having a high-capacity paper cassette capable of holding up to 50 sheets of 17" x 22" photographic or fine art media is extremely productive. For higher volume photographic printing (up to 17" x 22") the SP4000 is the best choice.

The SP4000 is about $1,200 cheaper than the SP7600. The SP7600's major benefit is its ability to produce photographic prints up to 24" wide. Although the SP7600 can handle any cut sheet size from letter to 24" wide, the SP4000's built-in cassette makes it more convenient to use everyday when printing on media up to 17" x 22".

17"

CONCLUSION: Both the SP4000 and SP7600 are considered professional level photographic printers. If you need to produce work up to 24" wide, the SP7600 is your best choice – otherwise the Epson Stylus Pro 4000 is the ultimate choice.

Secondary Competition

Canon imagePROGRAF W2200

FEATURE	Epson Stylus Pro 4000	Canon W2200
Maximum Media Width	17″	13″
Maximum Roll Media Width	17″ Wide - Standard	Not Available
Built-in Media Cutter	Yes	Not Available
Max. Paper Cassette Sheet Size	17″ x 22″	13″ x 19″
Max. Paper Cassette Sheet Quantity	Up to 250 sheets (plain paper)	Up to 250 sheets (plain paper)
Maximum Print Resolution	2,880 x 1,440 dpi	2,400 x 1,200 dpi
Print Head Technology	Variable Droplet Micro Piezo DX3	Bubble Jet™ on-demand
Smallest Droplet Size	3.5 Picoliter	4 Picoliter
Nozzle Configuration	180 Nozzles x 8	1,280 Nozzles x 6
Inking System	8-channels running 7-colors	6-color
Maximum Ink Cartridge Size	220ml x 8 (110ml x 8 std)	130ml x 6
Ink Type	Epson UltraChrome (pigment)	Canon Dye
13″ x 19″ Size Print Speed[1]	2:23 min:sec (production quality)	Data Not Available from Canon
Short Term Color Stability	Perfect for Prepress Proofing	Not Good Enough for Prepress Proofing
Long Term Color Stability	Perfect for Pro Photography	Not Good Enough for Professional Photography
Print Quality Opinion	Astonishing Photo Quality	Great for Graphics; Not Usable for Photography
Maximum Media Weight	1.5mm Thick Poster Board	90lb. Bond
Borderless Printing	Yes - All Four Sides	No
Auto Head Alignment	Yes	No
Standard Connectivity	USB 2.0, FireWire, Type-B Slot	USB 1.1, Parallel, FireWire, 10/100BaseT
Optional Connectivity	10/100 BaseT Ethernet	None Needed
Standard Printer Language	ESC/P2	Data Not Available from Canon
Optional Printer Language	Adobe PostScript 3	None Available from Canon
Standard Driver Support	Mac OS 9, X, & Windows	Mac OS 9, X, & Windows
Standard Warranty	1-Year Full Unit Exchange	Data Not Available from Canon
Estimated Purchase Price	**$1,795**	**$2,000**

17″

[1]13″ x 19″ print sample printed at photo quality. Canon time is expected to be about equal to Epson. | This color represents a winning feature within the comparisons.

Competitive Summary – Epson Stylus Pro 4000 vs. Canon imagePROGRAF W2200

The Canon W2200 printer is not considered a competitive product versus either the Epson or HP, due to its rather high street price and lack of features. Both the Epson Stylus Pro 4000 or HP DJ 120 series offer a significantly better product for the money.

Because they use dye inks, these units are not capable of serious prepress proofing or photographic applications due to poor color stability. Because the Epson has 100% pigmented inks, both short-term and long-term color stability are exceptional.

The image quality of the Canon W2200 is good enough for everyday graphic design work. However, the Epson excels at not just graphic design work, but also serious proofing and photographic applications – making the Epson a far more usable printer.

The media handling on the Canon W2200 is poor by comparison. The Epson Stylus Pro 4000 incorporates a 17" wide high-capacity cassette, in addition to a 17" wide roll with an automatic cutter for optimal roll media usage.

While the W2200 has a standard cassette handling the typical 13" x 19" paper size, the Epson has the ability to handle cut-sheet media in quantity up to 17" x 22". This gives the user much more flexibility in producing larger comps, design layouts, packaging mockups or final proofs that include all the necessary data for final print production – at 100% actual size!
No trimming, no scaling, no taping!

The Epson has the ability to print on media as thick as 1.5mm poster board! This gives you the ultimate flexibility in producing mockups of just about any type of material. Epson is considered the standard for fine art printing as well. The ability to handle thick media types, gives photographers and fine artists the ability to maximize their media choices.

With the Epson Stylus Pro 4000, you will be spending more time printing and less time maintaining. Due to permanent print head technology that never needs replacing, auto head alignment, auto nozzle check technology, in addition to eight 110ml or 220ml ink tanks, the Epson will rarely need your attention. The Canon W2200 uses a replaceable print head costing up to $570!

17"

When you compare the final output quality and useable print speeds from both units, the Epson becomes the overall winner.

Appendix

17″

Product Pricing Information

Epson Stylus Pro 4000

DESCRIPTION	EPSON PART NO.	EST. STREET[1]
Epson Stylus Pro 4000 Print Engine *7-color print engine configuration*	C511001UCM	$1,795
Epson Stylus Pro 4000 Graphics Bundle *7-color print engine configuration with 10/100 BaseT and Epson StylusRIP Professional 2.0 Software RIP*	C511001GAN[2]	$2,195
Epson Stylus Pro 4000 Engineering Bundle *4-color Dual CMYK print engine configuration with 10/100 BaseT Ethernet*	C511001CAD[2]	$1,995
Epson Stylus Pro 4000 Printer Cabinet Stand	C4000STAND[2]	$399
Epson StylusRIP Professional 2.0 Software RIP	C12C842972[2]	$299
Internal 10/100 BaseT Ethernet Type-B Card	C12C824052	$299
Paper Roller Spindle (Normal Tension) – 2" or 3"	C12C811171	$85
Paper Roller Spindle (High Tension) – 2" or 3"	C12C811191	$85
Replacement Printer Cutter Blade	C12C815291	$95
Replacement Ink Maintenance Tank	C12C890071	$45
Additional One-Year Epson Preferred Plus Service	EPP40EX1	$279
Additional Two-Year Epson Preferred Plus Service	EPP40EX2	$479

17"

[1]Estimated Purchase Prices as of 10/20/2003 | Please check with your local Epson reseller for the latest pricing information

[2]Expected to ship Q1 2004. See your local Epson Reseller for availability.

Product Pricing Information

Epson UltraChrome Ink

DESCRIPTION	EPSON PART NO.	MSRP
110ml Cartridge Sizes		
Photo Black Ink Cartridge	T543100	$69.95
Cyan Ink Cartridge	T543200	$69.95
Magenta Ink Cartridge	T543300	$69.95
Yellow Ink Cartridge	T543400	$69.95
Light Cyan Ink Cartridge	T543500	$69.95
Light Magenta Ink Cartridge	T543600	$69.95
Light Black Ink Cartridge	T543700	$69.95
Matte Black Ink Cartridge	T543800	$69.95
220ml Cartridge Sizes		
Photo Black Ink Cartridge	T544100	$112.00
Cyan Ink Cartridge	T544200	$112.00
Magenta Ink Cartridge	T544300	$112.00
Yellow Ink Cartridge	T544400	$112.00
Light Cyan Ink Cartridge	T544500	$112.00
Light Magenta Ink Cartridge	T544600	$112.00
Light Black Ink Cartridge	T544700	$112.00
Matte Black Ink Cartridge	T544800	$112.00

17"

The Epson Stylus Pro 4000 can use either 110ml or 220ml ink cartridges. You can even mix and match different sizes within the same printer.

17″